UNIVERSITÀ DEGLI STUDI DI TRIESTE
Deams
Dipartimento di Scienze Economiche, Aziendali, Matematiche e Statistiche "Bruno de Finetti"

START UP FINANCING & ENTREPRENEURIAL FUNDAMENTALS

From Concept to Capital

«Entrepreneurship and Business Modelling»
Academic Year 2024 – 2025

I. Financing & Investors

II. Early Stage Financial Risks

III. Innovation & Product Development Frameworks

IV. Funding Phases

V. Business Model Innovations

VI. Financial Instruments & Contractual Rights

I. Financing & Investors

- **Venture Capital (VC):**
  - Venture capital is a form of financing provided by **specialized investors**, particularly suited for innovative startups that often face difficulties accessing debt financing due to information asymmetries between banks and firms. Venture capitalists invest in successive funding rounds (Seed, Series A, B, C, etc.) in exchange for equity stakes. In addition to capital, they offer sector-specific expertise, strategic support, and access to valuable networks essential for business growth.

I. Financing & Investors

- **Business Angels:**
  - Business angels are **individual investors who use their own capital** to finance startups during the early stages. In addition to funding, they provide mentoring, industry-specific expertise, and strategic networking opportunities. They accept higher risk in exchange for the potential of substantial returns.

I. Financing & Investors

- **Bootstrapping:**
  - Bootstrapping refers to financing a startup's operations using **internal resources**, such as personal savings and the reinvestment of early revenues, thereby avoiding the need for external capital. This approach promotes organic growth and careful resource management, with the goal of achieving sustainability before seeking institutional funding.

I. Financing & Investors

- **Crowdfunding:**
  - Crowdfunding is a collective financing mechanism that allows startups to raise capital from a large number of small investors through digital platforms. The most common forms include:

    Reward-based: Backers receive a product, service, or other non-monetary benefits in return for their support (e.g., Kickstarter).

    Equity-based: Investors receive equity shares proportional to their contribution (e.g., Seedrs, Crowdcube).

    Debt-based (P2P lending): Investors lend money to the startup in exchange for a fixed interest return, without acquiring any ownership.

    Donation-based: Less common, this model involves contributions made as donations, with no expectation of financial return.

I. Financing & Investors

- **Private Equity & Late stage financing:**
  - Private equity refers to investments in mature or late-stage companies characterized by **stable cash flows and established business models**.
    The main difference compared to venture capital lies in the stage of investment: while venture capital typically targets early-stage, high-risk startups with strong growth potential, private equity focuses on later stages, aiming at buyouts, international expansion, and market consolidation. In some late-stage investments, Corporate Venture Capital (CVC) may also be involved—these are internal investment funds of large corporations seeking access to innovative technologies or emerging markets.

II. Early-Stage Financial Risks

- **Financing Gap:**
  - The financing gap represents the discrepancy between the capital required to support a startup's growth and the amount of funding it is able to secure from external sources. This phenomenon is particularly pronounced in innovative startups, where high levels of risk and technological and market uncertainty make access to traditional financing more difficult.

II. Early-Stage Financial Risks

- **Valley of Death:**
  - The "valley of death" refers to the critical period between prototype development and market entry. During this phase, a startup burns through capital without generating sufficient revenue, significantly increasing the risk of failure. This situation is especially common among innovative startups, where high R&D costs and the absence of steady cash flows make it particularly challenging to survive this stage.

II. Early-Stage Financial Risks

- **Burn Rate & Runway:**
  - **Burn Rate:** refers to the rate at which a startup consumes its financial resources, typically calculated on a monthly basis.
  - **Runway:** indicates the estimated period (in months) until the startup depletes its available capital, calculated by dividing the current cash balance by the monthly burn rate. These metrics are critical for planning future funding rounds and managing the risk of running out of capital.

III. Innovation & Product Development Frameworks

- **Proof of Concept (PoC):**
  - A Proof of Concept is an **experimental demonstration** aimed at verifying the technical feasibility and market potential of an idea.
    By developing simplified prototypes or pilot tests, the PoC enables **validation of the concept before committing significant resources.**
    This methodology is particularly **well-suited to deep tech ventures**, where technological risk is high and product complexity requires thorough early-stage validation.

III. Innovation & Product Development Frameworks

- **Agile Development and Lean Start-up:**
  - Agile Development and Lean Startup are **iterative and flexible** methodologies for product development.
    They emphasize short work cycles (sprints), continuous customer feedback, and rapid product adjustments. The Lean Startup method in particular focuses on building a Minimum Viable Product (MVP) and following the **Build-Measure-Learn cycle, thus minimizing risk and accelerating time-to-market.**

III. Innovation & Product Development Frameworks

- **Stage-Gate Process:**
  - The Stage-Gate Process is a structured framework for new product development (NPD), which divides the development path into **sequential stages separated by decision points or "gates."**
    At each gate, managers assess outcomes against predefined objectives and decide whether to proceed, revise, or terminate the project. This approach supports **systematic risk management** and **efficient resource allocation.**

III. Innovation & Product Development Frameworks

- **Technology Readiness Level (TRL):**
  - Technology Readiness Levels (TRL) are a nine-level scale used to assess the maturity of a technology, ranging from basic principles (TRL 1) to full commercial deployment (TRL 9). This system is instrumental in **evaluating technological risk, planning R&D investments,** and determining when a technology is ready for integration into commercial products—especially valuable for deep tech startups.

III. Innovation & Product Development Frameworks

- **Pretotyping vs Pretotyping:**
  - **Pretotyping** is a fast and low-cost technique used to test market demand for an idea or product through simplified simulations (e.g., landing pages, explainer videos, mock-ups), allowing early feedback collection before investing in full-scale development.
  - **Prototyping** involves creating a functional and preliminary version of a product that more accurately simulates its design, features, and usability. Prototypes are used to test performance in real-world conditions, identify potential issues, and refine the design prior to large-scale production.

IV. Funding Phases

- **Seed Stage:**
  - **Objective:** validate the concept, complete the MVP, and conduct initial market tests

    Funding sources: Business Angels, Pre-Seed/Seed Venture Capital, Crowdfunding, Accelerators

    Typical investment range: €50,000 – €1–2 million

    Risk level: very high

    Expected output: evidence of product–market fit

IV. Funding Phases

- **Early Stage (Series A-B):**
  - **Objective:** initial scalability, customer acquisition, and business model consolidation. During the Early Stage, the startup, having already demonstrated market fit, focuses on scaling operations, improving unit economics, and consolidating its market presence.

    Funding sources: Venture Capital (VC), Corporate Venture Capital (CVC)

    Typical investment range: €2 – €20 million

    Risk level: still high, but more contained

    Expected output: significant growth and improvement of unit economics

IV. Funding Phases

- **Early Stage (Series C and beyond):**
  - **Objective:** large-scale expansion, internationalization, mergers & acquisitions. The Growth Stage is the phase in which the startup has demonstrated the scalability and profitability of its business model and aims for rapid expansion, often at an international level.

    Funding sources: Late-Stage Venture Capital, Private Equity, CVC

    Typical investment range: over €10 million, often up to €50M+

    Risk level: lower, but with high exposure to competition and execution challenges

    Expected output: preparation for IPO, acquisition, or other exit strategies

V. Business model innovations

- **Platform Business Model:**
  - The Platform Business Model involves the creation of a digital platform that facilitates interaction between different user groups, such as providers and consumers. A key feature of this model is the presence of network effects: as the number of users increases, the value of the platform grows exponentially for all participants, since each new user enhances its overall usefulness and attractiveness. This approach is highly scalable and asset-light, making it particularly effective in dynamic digital markets.

V. Business model innovations

- **Subscription model:**
  - **Subscription-based models**, such as those commonly used by Software as a Service (SaaS) platforms, generate **recurring revenue** through periodic payments—typically monthly or annually. This revenue model enhances **cash flow predictability**, providing businesses with a more stable and forecastable financial structure compared to one-time sales. It also enables the optimization of **Customer Lifetime Value (CLTV)** by fostering long-term customer relationships and encouraging sustained engagement. Moreover, the subscription model supports **continuous product improvement**, as providers can regularly release updates, new features, and performance enhancements. This creates an ongoing value proposition for users and incentivizes retention.

V. Business model innovations

- **Freemium Model:**
  - **The Freemium Model** offers a basic version of a product or service for free, with the primary goal of rapidly attracting and onboarding a large user base. By lowering the barrier to entry, this model enables startups to maximize initial adoption and gather valuable user feedback at early stages. Over time, users are encouraged to upgrade to **premium plans** that unlock additional features, enhanced functionality, or improved performance. This approach not only helps to **test market demand** in a real-world setting but also creates a **funnel for monetization**, where engaged users are more likely to convert into paying customers. When executed effectively, the freemium model can lead to **high scalability**, **strong brand loyalty**, and a **sustainable path to profitability**, especially in digital products and SaaS offerings.

VI. Financial Instruments & Contractual Rights

- **Cap Table (Capitalization Table) :**
  - A document that outlines the ownership structure of a company, including shares held by founders, investors, employees (via stock options), and other stakeholders. It is critical for understanding equity distribution and decision-making power.

VI. Financial Instruments & Contractual Rights

- **Drag–Along Rights:**
  - A clause that allows majority shareholders to force minority shareholders to join in the sale of the company, under the same terms and conditions. This ensures smoother exits and negotiations in M&A scenarios.

VI. Financial Instruments & Contractual Rights

- **Tag–Along Rights:**
  - Tag-Along Rights are provisions that protect minority shareholders by granting them the right to participate in a sale of shares under the same terms as majority shareholders. These rights ensure fair treatment in exit events and allow minority investors to benefit from the same favorable conditions as controlling stakeholders.

VI. Financial Instruments & Contractual Rights

- **Liquidation Preference:**
  - **Liquidation Preference** is a contractual clause that defines the payment hierarchy among shareholders in the event of a company exit, such as a sale or liquidation. It ensures that preferred investors are paid before any distributions are made to common shareholders. Essentially, it serves as a protection mechanism for investors, allowing them to recover their original investment—or even receive a multiple of it—in the case of a favorable exit.

VI. Financial Instruments & Contractual Rights

- **Simple Agreement for Future Equity:**
  - The SAFE is a simplified contractual agreement that enables investors to receive equity at a future date under predefined terms, without being structured as debt. Unlike Convertible Notes, SAFEs do not carry interest rates or maturity dates, making them particularly efficient for early-stage fundraising. SAFEs offer simplicity and speed in negotiations while still providing favorable conditions to early investors.

VI. Financial Instruments & Contractual Rights

- **Convertible Notes:**
  - Convertible Notes are hybrid financial instruments that initially take the form of debt and convert into equity upon the occurrence of a future financing round. These instruments typically include a discount on the share price at conversion and a valuation cap, both designed to reward early investors for the higher risk they bear. Their flexible structure allows startups to postpone valuation negotiations until more reliable data on their potential becomes available.